

Performance-Based Contracts DOE Order Review

Directive Number and Title: DOE O 425.1B
Startup and Restart of Nuclear Facilities

Originating Office: Office of Environment, Safety and Health

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Background

- *Why, when, and how was the order and its contractor requirements document established?*

The 425.1 Order was approved September 29, 1995, replacing Order 5480.31. It was revised on December 28, 1998, and again approximately one year ago, on December 21, 2000. The original Order was a part of the response to the DNFSB Recommendation 92-6. The DNFSB reviews any proposed changes in light of the commitments in the response to 92-6. Some of the prescriptive elements in the order are based on efforts to resolve DNFSB comments or concerns.

- *What major modification and recent updates have been made?*

The latest change, dated December 21, 2000, was made to include NNSA and to respond to concerns raised by the DNFSB in August 1999 regarding the implementation of the Order. In response to these concerns, the Deputy Secretary tasked Field and Operations Offices to conduct a detailed assessment of the implementation of the Order at each site. Changes resulting from this assessment included clarification of requirements in areas that were identified as not being implemented effectively across DOE. In addition, the standard that provides increased discussion on the specific requirements as well as authorizes methods to implement those requirements was changed and reissued as DOE-STD-3006-2000. These changes did not alter the basic requirements or expectations of the program for startup and restart of nuclear facilities.

➤ *Scope.*

This Order is applicable to DOE and the NNSA. The Contractor Requirements Document (CRD), sets forth requirements to be applied to contractors awarded contracts for the operation and management of a DOE-owned or -leased facility. Contractor compliance with the CRD is required to the extent set forth in a contract. Activities regulated by the Nuclear Regulatory Commission or the Department of Transportation and Activities conducted under the authority of the Director, Naval Nuclear Propulsion Program are outside the scope of this Order.

Overview of Requirements

● *What is the order's purpose and how is it accomplished?*

This Order establishes the requirements for a review process to be followed by both the contractors and the Department of Energy, including the National Nuclear Security Administration (NNSA), for startup of new nuclear facilities and for the restart of existing nuclear facilities that have been shut down. The fundamental purpose is to ensure that readiness to conduct the nuclear operations safely and within the facility authorization basis has been achieved prior to authorizing startup. All aspects of the Order provide mechanisms and elements to achieve the overarching goal of assuring readiness for the conduct of safe operations prior to initiating nuclear operations.

● *What is the CRD's purpose and how is it accomplished?*

The CRD contains the elements of the program that must be met by DOE contractors for the safe startup or restart of nuclear facilities. The CRD also directs the contractor to DOE STD-3006-2000 for acceptable methods for achieving successful implementation of each element of the overall program. The CRD contains the steps that are the minimum necessary on the part of the contractor to achieve the safe startup or restart of a nuclear facility. The specific expectations defined in the CRD coupled with the oversight and confirmatory actions by DOE ensures that the startup or restart of the nuclear facility will be conducted safely.

Analysis

➤ *Do we still need to apply the order to contractors?*

Yes. This Order sets forth Departmental expectations for the minimum standards that a contractor must establish for assuring worker and public safety when starting (or restarting) nuclear facilities and it does not duplicate other requirements. Consequently, if this Order were no longer applied to DOE's contractors, there would not be any requirements for the startup or restart of DOE nuclear facilities. Since the startup and restart of nuclear facilities are distinguishable, from a safety standpoint, from continuing operation of those facilities, these requirements are necessary to maintain an acceptable level of safety.

● *If so, are there less bureaucratic approaches?*

There are no less bureaucratic approaches that provide an acceptable level of rigor to ensure that safe operations of DOE nuclear facilities will be attained. The requirements of the Order are focused on the expected outcomes or endpoints and permits the contractors to determine how to meet the requirements. The Order also allows the contractors, under certain circumstances and with DOE approval, to avoid conducting a restart review. The Order specifies a "graded approach" which permits great flexibility. There are no redundant requirements and there is universal agreement (including in the field) that none of its requirements should be eliminated. The requirements are generally based on widely accepted nuclear standards.

➤ *Are there any other useful changes to the contractor requirements document?*

There are no changes to the CRD that would be useful at this time. There could be cosmetic or editorial changes; however, these changes would not be worth the cost of changing the Order and implementing new requirements. The burden on the contractor and DOE to implement a change would be significant. Since DOE's goal is to reduce the number of requirements imposed on the contractors, it would be counterproductive to change this Order for such editorial or cosmetic reasons.

Summary Recommendations

Retain this Order as it is.

Minority Views

None.

Originating Office Comments

- *Summary of concerns and statement of whether they are reflected in the Summary Recommendations.*

All comments that were received found the Order to be useful and recommended retaining it. The only specific change recommended was from ORO, which wanted a revision to describe performance-based assessments of contractor compliance, which is arguably better suited for a guidance document rather than the Order itself.